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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-------------------|-----------------|----------------------|-------------------------|-------------------------|--|
| 09/462,109 | 12/30/1999 | MASAHIKO HIROSE | | 4688 | |
| 22511 | 7590 04/17/2003 | | | | |
| | L & OSHA L.L.P. | | EXAMINER | | |
| SUITE 2800 | | | ICTOR S | | |
| HOUSTON, T | X 77010 | | ART UNIT | PAPER NUMBER | |
| | | | 1771 | | |
| | | | DATE MAILED: 04/17/2003 | DATE MAILED: 04/17/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | AS |
|---|--|--|---|--------------|
| , | | Application No. | Applicant(s) | |
| | | 09/462,109 | HIROSE ET AL. | |
| Office Action | Summary | Examiner | Art Unit | |
| | | Victor S Chang | 1771 | |
| | E of this communication appea | ars on the cover sheet with | the correspondence addre | ess |
| Period for Reply | | S SET TO EVEIDE 2 MO | NTU(S) EDOM | |
| THE MAILING DATE OF - Extensions of time may be availal after SIX (6) MONTHS from the n - If the period for reply specified ab If NO period for reply is specified - Failure to reply within the set or e | TORY PERIOD FOR REPLY I THIS COMMUNICATION. ble under the provisions of 37 CFR 1.136(nailling date of this communication. sove is less than thirty (30) days, a reply will above, the maximum statutory period will xtended period for reply will, by statute, cater than three months after the mailing date as 7 CFR 1.704(b). | a). In no event, however, may a rep ithin the statutory minimum of thirty (apply and will expire SIX (6) MONTH suse the application to become ABAI | ly be timely filed 30) days will be considered timely. 45 from the mailing date of this comn NDONED (35 U.S.C. § 133). | nunication. |
| | nmunication(s) filed on <u>18 Ma</u> | urch 2003 | | |
| 2a)⊠ This action is FIN | | action is non-final. | | |
| , | ion is in condition for allowand | | ers prosecution as to the r | nerite ie |
| closed in accordar | nce with the practice under Ex | | | (ICINS IS |
| Disposition of Claims | | | | |
| ·- · · · · · · · · · · · · · · · · · · | and 19 is/are pending in the a | · • | | |
| | aim(s) is/are withdrawn | from consideration. | | |
| 5) Claim(s) is/a | | | | |
| 6)⊠ Claim(s) <u>1,2,5,18 a</u> | | | | |
| 7) Claim(s) is/a | | | | |
| 8) Claim(s) are Application Papers | subject to restriction and/or e | election requirement. | | |
| 9) ☐ The specification is of | objected to by the Examiner. | | | |
| 10) The drawing(s) filed | on is/are: a) accepte | d or b) objected to by the | e Examiner. | |
| | equest that any objection to the d | | | |
| 11)☐ The proposed drawi | ng correction filed on is | s: a)□ approved b)□ dis | approved by the Examiner. | |
| | ed drawings are required in reply | | | |
| · | ion is objected to by the Exan | niner. | | |
| Priority under 35 U.S.C. §§ | | | | |
| _ | made of a claim for foreign p | riority under 35 U.S.C. § | 119(a)-(d) or (f). | |
| a) ☐ All b) ☐ Some * | | | | |
| 1.☐ Certified copi | ies of the priority documents h | nave been received. | | |
| <u></u> | ies of the priority documents h | | | |
| application | e certified copies of the priority on from the International Bure ailed Office action for a list of | au (PCT Rule 17.2(a)). | | age . |
| | nade of a claim for domestic p | • | | oplication). |
| | of the foreign language provis | • | | . , |
| | made of a claim for domestic | | | |
| Attachment(s) | | | | |
| Notice of References Cited (P Notice of Draftsperson's Pater Information Disclosure Statem | nt Drawing Review (PTO-948) | | mmary (PTO-413) Paper No(s). ormal Patent Application (PTO-1 | |

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DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Rejections not maintained are withdrawn.

Response to Amendment

3. Claims 1, 2, 5, 18 and 19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ikeda et al. (US 5178766), substantially for the reasons set forth in section 8 of Paper No. 18, together with the following additional observations.

With respect to Applicant's Response arguing that "Ikeda et al. do not disclose a reverse osmosis membrane prepared according to the processes recited in claim 1" (Response, page 7, second complete paragraph), the Examiner notes that the process limitations have not been shown on the record to produce a patentably distinct article, as such the formed articles are rendered *prima facie* obvious. It should be pointed out that product-by-process claims are product claims and that to be limiting in a product claim, a process limitation must be evidenced as effecting the structure or chemistry of the resultant product over the prior art. Further, the burden of proof for this showing is on Applicant after the Examiner presents an otherwise prima facie rejection. Note MPEP 2113 for a more detailed description.

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Applicant's argument that "a salt rejection ratio of 98.1% (i.e., Cp/Cf = 1.9%) of the membrane according to Example 1 of Ikeda et al. is equivalent to a 94.3% (Cp/Cf = 5.7%) salt rejection ratio under the test conditions of the present invention" (Response, page 10 top paragraph) is not persuasive. The Examiner notes that Applicant has not provided express support in the Specification or sufficient evidence in the Response regarding how the salt rejection ratio is actually equivalent to 94.3%, nor does the Examiner find such equivalency inherent. Further, it is noted that the different measuring conditions are not recited in claim 1. If further prosecution, i.e., a CPA or RCE, is contemplated, the Examiner would like to strongly urge Applicants provide Declaration(s) which would provide comparative study results to differentiate the instant invention from Ikeda's membrane. Declaration should be made by a relatively disinterested person such as, e.g., a customer.

With respect to Applicant's Response arguing that "Hirose et al. do not teach or suggest reverse osmosis membranes prepared by the processes recited in claim 1" (Response, page 12, second complete paragraph), the Examiner again notes that the process limitations have not been shown on the record to produce a patentably distinct article, and consequently the formed articles are rendered *prima facie* obvious. Further, if there are distinct structural limitations, which would differentiate the instant invention from Hirose's membrane, the distinct limitations appear absent from claim 1.

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE

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MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Victor S Chang whose telephone number is 703-605-

4296. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Terrel H Morris can be reached on 703-308-2414. The fax phone numbers

for the organization where this application or proceeding is assigned are 703-872-9310

for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-308-

0661.

VSC

April 16, 2003

DANIEL ZIRKER PRIMARY EXAMINER GROUP 1300-

1700

Samil Zuku